

Claims

What is claimed is:

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1. A system for implementing behavioral operations,
comprising:

a search engine connected to an input data;

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an associative match memory connected to the search engine;

and

a behavioral operation unit connected to the associative match
memory.

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2. The system of claim 1, further including a field descriptor
array connected to the associative memory.

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3. The system of claim 1, wherein the associative match
memory includes an association and a behavioral indicator in an
entry.

4. The system of claim 1, wherein the associative match
memory includes a field descriptor in an entry.

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5. The system of claim 3, wherein the behavioral indicator
is an association set.

6. The system of claim 3, wherein the behavioral indicator is a qualifier set.

5 7. The system of claim 3, wherein the behavioral indicator is a test set.

8. The system of claim 7, wherein the test set includes a score field.

10 9. The system of claim 3, wherein the behavioral indicator is a stack set.

15 10. The system of claim 3, wherein the behavioral indicator is an exclusion set.

11. The system of claim 3, wherein the behavioral indicator is a continuation set.

20 12. The system of claim 2, wherein the field descriptor array includes a byte offset.

13. The system of claim 2, wherein the field descriptor array includes a mask.

14. A method of behavioral operation of a data document, comprising the steps of:

- a) scanning an input data to find a match;
- 5 b) when a match is found determining a behavioral set associated with the match; and
- c) when the behavioral set is an association set, using an association in the match to acquire a desired information.

10 15. The method of claim 14, further including the steps of:

- d) when the behavioral set is a qualifier set, determining a field descriptor pointer;
- e) looking up a field descriptor pointed to by the field
- 15 descriptor pointer;
- f) determining a field to be examined.

16. The method of claim 15, further including the steps of:

- 20 g) determining a mask associated with the field descriptor;
- h) applying the mask to the field to form a masked field.

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